

In the Claims

Please cancel claims 33-40 without prejudice or disclaimer.

Please add new claims 41-50 as follows:

41. An endoluminal prosthesis, comprising an elongate support wire member joined to a polymer cladding, the joined support wire member and polymer cladding being helically wrapped into an open cylindrical structure such that adjacent windings of the polymer cladding have overlapping regions that are bonded to one another.

42. The endoluminal prosthesis according to claim 41, wherein the polymer cladding completely surrounds the support wire member along its length.

By 43. The endoluminal prosthesis according to claim 41, wherein the polymer cladding comprises a longitudinally extending recess and wherein the support wire member is positioned within said longitudinally extending recess.

44. The endoluminal prosthesis according to claim 41, wherein the polymer cladding comprises a material selected from the group consisting of polytetrafluoroethylene, polyurethane, polyethylene, polypropylene, polyamide, polyimide, polyester, polyfluoroethylenes, silicone, fluorinated polyolefin, fluorinated ethylene/propylene copolymer, perfluoroalkoxy fluorocarbon, ethylene/tetrafluoroethylene copolymer, and polyvinylpyrrolidone.

45. The endoluminal prosthesis according to claim 41, wherein the support wire member comprises a material selected from the group consisting of shape memory alloys, biocompatible spring steels, biocompatible spring metal alloys, and carbon fibers.

46. The endoluminal prosthesis according to Claim 41, wherein the support wire member comprises a shape memory alloy with a pre-programmed austenite dimensional state.

47. The endoluminal prosthesis according to Claim 41, further comprising an inner and an outer tubular substrate, wherein the joined support wire member and polymer cladding are encapsulated therebetween.

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48. The endoluminal prosthesis according to Claim 47, wherein the inner and outer tubular substrates comprises a biocompatible material selected from the group consisting of expanded polytetrafluoroethylene, polyethylene, polyethylene terephthalate, polyurethane, and collagen.

49. The endoluminal prosthesis according to Claim 41, wherein the support wire member is in the form of a planar ribbon.

50. The endoluminal prosthesis according to Claim 41, wherein the polymer cladding has a generally quadrilateral cross-sectional configuration.